

IN THE SPECIFICATION

Please amend paragraphs and headings of the specification, as shown below, in which deleted terms are shown with strikethrough and/or double brackets, and added terms are shown with underscoring. Also, please add new paragraphs [000.1] and [0097], and a heading associated with new paragraph [000.1] as shown below.

New Paragraph [000.1] and Associated Heading

CROSS-REFERENCE TO RELATED APPLICATIONS

[000.1] The present invention is the US National Phase of International Application PCT/JP2004/007639, filed 27 May 2004, which claims priority under 35 USC 119 based on Japanese patent application No. 2003-151871, filed 29 May 2003. The entire contents of the International and priority Japanese applications are incorporated herein by reference.

Paragraph [0015] To overcome the above-mentioned problems, according to a first aspect of the invention ~~of claim 1~~, a film member such as a polymer film and a metal foil is formed into a curved shape such as a dome, a barrel, and a cone, the periphery of this curved shape is fixed to another structure, and the resonance frequency of the curved shape in the in-plane stretching is set at a frequency equal to or higher than the audible frequency band to insulate or absorb sound by the elastic force of the film member.

Paragraph [0017] The invention according to ~~claim 2~~ a second aspect thereof comprises a film member, such as a polymer film and a metal foil, and a frame body having at least one opening of a lattice shape, a honeycomb shape or an annular shape, wherein the film member is

fixed to the frame body, the section of the film member surrounded by the frame body is formed into a curved shape such as a dome, a barrel, and a cone, and the resonance frequency of the curved shape in the in-plane stretching is set at a frequency equal to or higher than the audible frequency band, thereby insulating or absorbing sound by the elastic force of the film member.

Paragraph [0019] The invention ~~of claim 3 according to a third aspect thereof~~ refers to a sound insulation/absorption structure according to ~~claim 1 or claim 2 either of the first or second aspect~~ in which a holding means is provided to hold the film member in the curved shape.

Paragraph [0021] The invention ~~of claim 4 according to a fourth aspect thereof~~ refers to the sound insulation/absorption structure according to ~~claim 1 or claim 2 either of the first or second aspect~~ in which the tensile force is applied to the film member.

Paragraph [0023] The invention ~~of claim 5 according to a fifth aspect thereof~~ refers to the sound insulation/absorption structure according to ~~claim 1 or claim 2 either of the first or second aspect~~ in which the film member is replaced by a plate member, such as a plastic plate, a metal plate and a veneer board (plate), formed into ~~[[a]]~~ the curved shape such as a dome, a barrel and a cone.

Paragraph [0025] The invention ~~of claim 6 according to a sixth aspect thereof~~ comprises a film member, a frame body, an elastic body, and a supporting plate, wherein the elastic body and the film member are placed on the supporting plate to be pressed with the frame body so that the elastic body and the film member are held between the frame body and the supporting plate to

apply a tensile force to the film member, the film member is formed into a curved shape such as a dome, and the resonance frequency of the curved shape in the in-plane stretching is set at a frequency equal to or higher than the audible frequency band to insulate or absorb sound by the elastic force of the film member.

Paragraph [0027] The invention of claim 7 according to a seventh aspect thereof comprises two film members, a frame body, and an elastic body, wherein the elastic body is placed between the two film members, the elastic body and the two film members are held between the frame body to apply a tensile force to the two film members, the two film members are formed into a curved shape such as a dome, and the resonance frequency of the curved shape in the in-plane stretching is set at a frequency equal to or higher than the audible frequency band to insulate or absorb sound by the elastic force of the film members.

Paragraph [0029] The invention of claim 8 according to any one of claims 1 through 7 according to an eighth aspect thereof refers to the sound insulation/absorption structure of any of the first-seventh aspects, wherein the film member formed into the curved shape or the plate member formed into the curved shape is set in a one- or two-dimensional array.

Paragraph [0030] With this arrangement, by setting the film member(s) formed into the curved shape or the plate member formed into the curved shape in a one or two-dimensional array, it is possible to form a sound insulation/absorption structure which extensively insulates or absorbs sound by stiffness control.

Paragraph [0031] The invention of claim 9 according to any one of claims 1 through 8
according to an ninth aspect thereof refers to the sound insulation/absorption structure of any of
the first-eighth aspects, wherein the surface density, elastic constant, outer peripheral dimensions,
and curvature radius of the curved section of the film member(s) or the plate member [[is]] are
set so that the resonance frequency in the in-plane stretching vibration is within or higher than the
audible frequency band.

Paragraph [0032] The invention of claim 10 according to any one of claims 1 through 9
according to an tenth aspect thereof refers to the sound insulation/absorption structure of any of
the first-ninth aspects, wherein the film member(s) or the plate member and the frame body
securing these are integrally formed.

Paragraph [0033] In the invention of claim 11 according to an eleventh aspect thereof, the
film member(s) or the plate member constituting the sound insulation/absorption structure
according to any one of claims 1 through 10 of the first-tenth aspects is provided with a
piezoelectric member to which a circuit presenting a negative capacitance is connected.

Paragraph [0034] By connecting the circuit presenting the negative capacitance to the
piezoelectric member attached to the film member(s) or the plate member, it is possible to
constitute a sound insulation/absorption device which can electrically control the sound
insulation/absorption performance.

Paragraph [0035] In the invention of ~~claim 12~~ according to an twelfth aspect thereof, the film member or the plate member constituting the sound insulation/absorption structure according to any ~~one of claims 1 through 10 of the first-tenth aspects~~ is a member with piezoelectric properties to which a circuit presenting a negative capacitance is connected.

Paragraph [0036] By connecting the circuit presenting the negative capacitance to the film member(s) or the plate member having the piezoelectric properties, it is possible to constitute a sound insulation/absorption device which can electrically control the sound insulation/absorption performance.

Paragraph [0037] In the invention of ~~claim 13~~ according to an thirteenth aspect thereof, the sound insulation/absorption structure according to any ~~one of claims 1 through 10 of the first-tenth aspects~~ is applied to structures such as an automobile, a vehicle such as an electric train, an aircraft, a marine vessel and other transport equipment (vehicle), a panel, partition and other building material, a sound insulation wall, a sound-proof wall, a building structure, a chamber, electric equipment, a machine, acoustic equipment and the like to insulate or absorb sound.

Paragraph [0038] In the invention of ~~claim 14~~ according to an fourteenth aspect thereof, the sound insulation/absorption structure according to any ~~one of claims 1 through 10 of the first-tenth aspects~~ is applied to a member constituting the structures such as an automobile, a vehicle such as an electric train, an aircraft, a marine vessel and other transport equipment (vehicle), a panel, a partition and other building material, a sound insulation wall, a sound-proof wall, a

building structure, a chamber, electric equipment, a machine, acoustic equipment and the like to insulate or absorb sound.

Paragraph [0039] In the invention of ~~claim 15~~ according to an fifteenth aspect thereof, the sound insulation/absorption device according to ~~claim 11 or claim 12~~ either the eleventh or twelfth aspect is applied to structures such as an automobile, a vehicle such as an electric train, an aircraft, a marine vessel and other transport equipment (vehicle), a panel, a partition and other building material, a sound insulation wall, a sound-proof wall, a building structure, a chamber, electric equipment, a machine, acoustic equipment and the like to insulate or absorb sound.

Paragraph [0040] In the invention of ~~claim 16~~ according to an sixteenth aspect thereof, the sound insulation/absorption device according to ~~claim 11 or claim 12~~ either the eleventh or twelfth aspect is applied to a member constituting the structures such as an automobile, a vehicle such as an electric train, an aircraft, a marine vessel and other transport equipment (vehicle), a panel, a partition and other building material, a sound insulation wall, a sound-proof wall, a building structure, a chamber, electric equipment, a machine, acoustic equipment and the like to insulate or absorb sound.

New Paragraph [0097] Although there have been described what are the present exemplary embodiments of the invention, it will be understood that variations and modifications may be made thereto within the spirit and scope of the appended claims.